WCOSS Draft RFP Posted to FBO 11/12/2010
Answers to Questions received prior and during 12/6/2010 Industry Day

1. Q: Section F.1.3 - Consideration for not meeting performance requirements
   Can the government be more specific about what monthly charges are subject to performance penalties?

   A: Consideration is applied to all hardware, software, facilities and services that the Contractor delivers and/or supports.

2. Q: December 6th Industry Day
   Will the government provide a list of December 6th Industry Day attendees?

   A: The attendee list will be publically available via the project Website.

3. Q: Will NCEP or the NOAA CIO have responsibilities for the funding and providing technical direction for this contract after award?

   A: The COTR designated in Section G.2 will provide the technical direction for this contract after award.

4. Q: NOAA/NWS/NCEP currently has this opportunity valued at $502M in the draft RFP. NOAA/NWS/NCEP is currently funded at approximately $20M a year which yields programmatic funding at $200M for the program over 10 years. If NOAA does not receive new funding to support this in the FY12 President's budget, will NOAA/NWS/NCEP de-scope the value or will NOAA/NWS/NCEP seek to reprogram money from other NOAA budget line items to maintain this contract value?

   A: Funding for the base period of performance was approved by the NOAA and the Department of Commerce. The total estimated value of this contract is the not-to-exceed contract value. The award and potential scope of the contract after award is subject to availability of appropriations and evolving agency need.

5. Q. Will the RFP be released if the programmatic funding listed is not appropriated or approved?

   A: The RFP will be released. Funding for the base period of the contract was approved by NOAA and the Department of Commerce. The award and potential scope of the contract after award is subject to availability of appropriations and evolving agency need.

6. Q: Section L seems to be inconsistent in terms of costs. Section L.8 Cost/Price Proposal – The deliverable as described in L.6 states that "the offeror shall proposal a complete end-to-end solution to include the primary and backup WCOSS and facilities…." However, section L.8 describes pricing in terms of Labor Categories. Please clarify how the cost/price of the solution is to be proposed.

   A: The offeror shall propose a complete end-to-end solution to include the primary and backup WCOSS and facilities. Section L will be revised in the final RFP.

7. Q: L.4 Type of Contract, Please explain the circumstances under which the government would utilize labor hour or T&M type task orders.

   A: The Government anticipates utilization of labor hour or T&M task orders for requirements for system optimization, hardware and software maintenance, software development, systems design, and hardware and software analysis, and other situations where there are no clearly defined deliverables. The type of task order will be determined by the CO at the time of issuance.

8. Q: B.1 Contract Type, under a T&M type order, the FAR precludes the application of Fee for ODCs, Travel and Materials however, an OEM has fee included in its catalog/list/discounted price. How does the government intend to evaluate the differentiation between an OEM vs. an Integrator response and ensure the application of Fee is applied in accordance with FAR guidelines?

   A: Offeror's should utilize the "notes" section of the Cost/Price Template to explain or justify their cost element(s). This justification could include a statement such as 'Item is based on catalog/list/discounted price as per Attachment 5 (screen shot from catalog, www site, etc)'. The Government will utilize this information to determine price reasonableness in accordance with FAR guidelines.

9. Q: Table 3.6-1 indicates the required base compute growth for Fiscal Year 2012-2013 is equivalent to the current WCOSS performance provided by the incumbent contractor. Therefore, the incumbent contract has a comprehensive solution in place today which requires no standup costs. How will the government evaluate price reasonableness given the advantage of the incumbent contractor?

A: The Government believes the incumbent contractor has similar standup costs to any other offeror with regard to proposing a completely new system and facilities. The Government does not consider "the advantage of the incumbent" to be an unfair advantage that would result in an unfair competitive advantage.

10. Q: 3.14.1 System Delivery – Pre-delivery system Early Access (2 months). Will this system be provided as a separate cost element?

A: A separate cost/price for the pre-delivery system is not required.

11. Q: 3.14.2 Pre-delivery system Early Access (6 months) – Will this system be provided as a separate cost element?

A: A separate cost/price for the pre-delivery system is not required.

12. Q: 3.15.1 System Administration – Given the government anticipates a system administration staff of at least five personnel, is this element priced as a T&M or Labor hour task order separate from the end-to-end solution?

A: It is anticipated that staff administration labor is itemized as part of the overall fixed price labor level-of-effort proposed.

13. Q: 3.15.2 Application Support - Given the government anticipates an application support staff of at least three full-time personnel, is this element priced as a T&M or Labor hour task order separate from the end-to-end solution?

A: It is anticipated that application support staff labor is itemized as part of the overall fixed price labor level-of-effort proposed.

14. Q: The risk for having an OUT requirement in excess of 99.3% and receiving drastically reduced payment introduces a huge risk, which could translate into increased proposed system costs in order to minimize risk. In fact this risk may be so large as to make potential bidders not respond to the RFP. Would the Government entertain alternatives to this provision?

A: The consideration requirements are consistent with the stringent performance requirements identified in the section C. Statement of Work. The OUT requirement is 99.9%, see C.3.3.2. The Government does not consider 99.9% excessive and this performance level has and continues to be exceeded. Alternatives to this requirement will not be considered acceptable.

15. Q: F.1.3 Consideration for Not Meeting Performance Requirements, It is understood the application of Consideration and Penalties will be calculate at the Task Order level and in the event there are multiple "subsystems" within the end-to-end system, which operate independently of each other, within the same Task Order and whose performance does not affect other subsystems, the application of disincentives noted in the table of this DRFP section will be applied to and limited to the affected subsystem of the Task Order. Please confirm.

A: Consideration applies to the value of the total delivered solution. The total delivered solution may or may not be awarded in multiple task/delivery orders.

16. Q: H.19 Successor Contractor, It is understood the Successor Contractor at the direction of the Contracting Officer shall have access to and be allowed to interview the contractor employees. It is understood that contact, interviews and discussions shall not occur during the employees scheduled work periods and not disrupt the ongoing operation of the existing contract task orders. Please confirm.

A: Yes.

17. Q: For the services and labor provided by the contractor in support of the primary and backup systems, how does the labor factor into the disincentives and payment? Can they be broken out separately to tie into the root cause analysis, and then paid based on this analysis, which could include facilities, labor, operational use time, and development use time?

A: Consideration applies to the value of the total delivered solution. The Contractor is responsible for meeting performance requirements on hardware, software, facilities, and services that the Contractor delivers and/or supports.

18. Q: The Small-Business subcontracting goals are set at 34.5%. Are these goals applied to total contract value or support labor?

A: These small business subcontracting goals apply to the total contract value.

19. Q: Section F.1 Consideration

The solicitation states in Section F that the contractor shall provide the integrated components of the High Performance Computing (HPC) systems and facilities to meet the performance requirements. However, the solicitation also states that the contract type is an IDIQ contract and there is no mention of a base Task Order 1 to be issued at time of contract award. The contractor's ability to meet these performance requirements will be dependent upon receipt of a base order for the combined items (facilities, hardware, software, services, etc) for the computing systems and facilities. Please confirm that a Task Order 1 as described above will be issued with the base contract award.

A: Task Order 1, as described above, will be issued concurrently with base contract award, contingent upon availability of funds. Section L will be revised accordingly.

20. Q: Section I. Contract Clauses

The objectives of this acquisition are described to include two operational HPC systems, (including hardware and software), related HPC services, facilities, related facility services, technology expansions and refreshes. All of these items meet the definition of commercial items or services set forth in FAR Part 2.101, and as such are exempt from Cost Accounting Standards (CAS) and cost and pricing data. Accordingly, we request that all CAS and cost and pricing data clauses be deleted from the solicitation.

A: The Offeror may indicate in their proposal that any (or all) HPC System and/or subsystems comply with the FAR 2.1 definition of commercial item(s) or service(s). The Offeror may utilize the "notes" section of the Cost/Price Template to annotate such information. Please note that once awarded, CAS requirements may be applicable and, therefore, shall not be deleted from the solicitation's provisions or the (award) contract's clauses.

21. Q: Section I.8 INDEFINITE QUANTITY (FAR 52.216-22) (OCT 1995)
What schedule is part b. referring to that has maximum and minimum order quantities? Will there be an order placed with the IDIQ award?

A: Part b. refers to the minimum and maximum order amount defined in Section B.2. It is anticipated that Task Order 1 will be issued concurrently with base contract award, contingent upon availability of funds. This task order award will most likely exceed the minimum order requirement.

22. Q: Section L.4 TYPE OF CONTRACT (FAR 52.216-1) (APR 1984)

Is it the intent to award the base period task order from the proposed prices submitted in pricing exhibit (attachment 2)?

A: Yes.

23. Q: This Section L.4 states that the contract will be an IDIQ with fixed price, T&M or labor hour delivery orders. However, Attachment 2 – Cost/Price template provides what appears to be a cost-plus-fixed-fee template. This does not appear to be the correct template for this opportunity – please advise.

A: The purpose of the template is not to suggest that the Government is contemplating award of a cost plus-fixed fee contract. Rather, in accordance with the FAR, the Government is utilizing cost elements to assess cost/price reasonableness. In sum, the template provides cost elements which assist in the overall cost/price evaluation.

24. Q: Section L.8 COST/PRICE PROPOSAL
Can the supplier add another category to Attachment 2 for the Hardware and Software systems?

A: Yes. The supplier may add another category to Attachment 2 for the Hardware and Software systems.

25. Q: Section L.8 COST/PRICE PROPOSAL
Since this is a competitive bid can this be treated as a Commercial bid as opposed to cost plus fee bid as described above?

A: The Offeror may treat this as a commercial bid. As discussed in response to Question 23 above, the template provides cost elements which assist in the overall cost/price evaluation. The Offeror may propose that any (or all) HPC System and/or subsystems comply with the FAR 2.1 definition of commercial item(s) or service(s). The Offeror may utilize the "notes" section of the Cost/Price Template to annotate such information.

26. Q. The instructions set forth in L.8.13 and Attachment 2 – Cost/Price template
This template requests cost information while the solicitation states that FP/T&M or LH tasks will be issued. Please clarify.

A: The government anticipates issuing a fixed price task order concurrently with base contract award, contingent upon availability of funds. Where a fixed price task order is not appropriate the Government may issue a T&M or LH task order.

27. Q. The instructions set forth in L.8.13 and Attachment 2 – Cost/Price template
Where shall the contractors present pricing for the growth options?

A: The Government encourages offerors to provide applicable growth options in the attachment 2 cost/price template. Section L and attachment 2 will be updated accordingly in the final RFP.

28. Q. The instructions set forth in L.8.13 and Attachment 2 – Cost/Price template
Where should the Hardware and Software systems be reflected?

A: The supplier may add another category to Attachment 2 for the Hardware and Software systems.

29. Q: In the Draft, there is an option for Transition at the end of the contract but no information on the requirement for transition into the contract from the existing contractor to the new contractor. What mechanism has the Government provided for the smooth transitioning to the new contractor in case the incumbent contractor is not selected?

A: The requirements for this contract are independent of the requirements to transition from current to new contract. The transition from the current contract into the new contract and transition from the new contract to the follow on contract is not a requirement for this contract. Within the draft RFP, the 2-year transition option is to maintain high performance computing and facilities capabilities provided by the applicable contract.

30. Q: Incoming Transitions period: Several sections discuss the requirements for transitioning out of the contract (i.e. B.1: 2 year transition option), but not the transitioning into the contract for continuity of operations (i.e.: If new systems are delivered, data migration/synchronization will likely be required prior to the start of acceptance testing). Assuming there is a transition period, what is the length of this transition period? What are the requirements of the incumbent contractor for this transition?

A: There are no transition requirements for the incumbent in the RFP for the new WCOSS.

31. Q: 3.6.4 Workload Projections – Table 3.6-1 provides estimated computing increases by Fiscal Year, however, it is stated that upgrades shall occur every 30 months. Please clarify the compute growth and schedule required for the proposed system upgrade.

A: From the beginning of the base period with base funding: the requirement is for the initial WCOSS within +12 months and an upgrade +30 months. From the beginning of the option period with base funding, if the option period is exercised by the Government: the requirement

is for an upgrade +1 month and again at +30 months. Growth options may be exercised at the discretion of the Government during the life of the contract to provide additional upgrades. The final RFP will clarify C.3.6 and table C.3.6-1 compute growth and schedule for upgrades.

32. Q: B.5 Funding Profile – please confirm the corresponding Fiscal Year to the base year in the funding table.

    A: The Government plans for a contract award date in October 2011. If the contract is awarded in October 2011, the base period of performance would begin in FY12.

33. Q: The base year funding profile for the first two years is out of balance to the requirement stated. Is this funding profile subject to change in order to more reasonably accommodate the cost of two facilities, compute, storage and support required?

    A: The base funding profile will not change. Section C.3.6 and table 3.6-1 provide estimated performance using base funding and optional funding for growth options. The funding profile information contained in Section B.2 is consistent with Government estimates for performance, including increases and the delivery schedule noted in Section C.3.14. The final RFP will clarify Section C.3.6 and table 3.6-1.

34. Q: 3.14.3 System Delivery - The Primary and Backup WCOSS shall pass acceptance with 12 months of contract award (~Oct'11, Cover letter). Please confirm that the funding for Base Year 1 in Table B.5-1 is for the first year after the award of the contract, while the first systems are being built and accepted. (See WCOSS Table at the end of these questions)

    A: The funding specified in Table B.5-1 Base Year 1 will be available during the system / facilities build-out and contingent upon availability of funds.

35. Q: The base contract is for 5 years (B.1), with upgrades every 30 months (3.6.4). Which of the systems (Initial, 1st upgrade, or 2nd upgrade, or all 3) or on which time periods are required to be bid? Please be specific on which system or upgrade to bid and on an exact time frame, by year after contract award. Initial system? 1st upgrade at 30 months? 2nd upgrade at 60 months?

    A: From the beginning of the base period with base funding: the requirement is for the initial WCOSS within +12 months and an upgrade +30 months. From the beginning of the option period with base funding, if the option period is exercised by the Government: the requirement is for an upgrade +1 month and again at +30 months. Growth options may be exercised at the

discretion of the Government during the life of the contract to provide additional upgrades. The final RFP will clarify C.3.6 and table C.3.6-1 compute growth and schedule for upgrades.

36. Q: 3.20.1 Geographical Location – Section 3.20.1 states that "One facility shall be located 120 miles or greater from Washington, DC. The two facilities shall be separated by at least 120 miles." Does that also mean that one site can be in the Washington, DC metro area provided the second site is 120 miles away or do both facilities have to located 120 miles or greater from Washington DC?

A: Yes, one Contractor provided facility can be in the Washington, DC area provided the other facility is located at least 120 miles or greater from Washington, DC and the two facilities are separated by at least 120 miles.

37. Q: It has been publically announced that the new Fairmont, West Virginia facility will be ready in the summer of 2011. Is this facility available for one of the WCOSS sites? Will the facility ever be available for WCOSS? If so, when?

A: There is no Government furnished facility available for the new WCOSS contract.

38. Q: The language around "WCOSS" is a little confusing. In places it means the total of the primary and backup systems and in some there is a primary WCOSS and a backup WCOSS. Can we assume that whenever WCOSS is used without the Primary and/or Backup modifier that it means the total of both WCOSS systems?

A: Yes, the reference is to both the Primary and Backup systems when the WCOSS is used without the Primary and/or Backup modifier. The final RFP will ensure this convention is followed.

39. Q: Section 3.20.9 calls for the contractor to propose a NCEP Alternate Processing Site (APS). Is this the same as the backup WCOSS?

A: No, the NCEP APS equipment is a separate requirement and is independent from the Primary and Backup WCOSS. The NCEP APS shares facilities with either the Primary or Backup WCOSS and the Government will provide the NCEP APS equipment.

40. Q: 3.11.5 Latency – The Contractor shall describe its approach to maximize WCOSS throughput when the WAN latency is greater than 20 ms to NCEPs Washington DC, metro WAN. Given the government is responsible for the WAN, how will the latency be determined once the contractor identifies the facilities to provided in the solution? Will this be part of the proposal evaluation?

    A: There is no requirement for the Contractor to determine the level of WAN latency. The latency requirement contained in Section C.3.11.5 will be clarified in the final RFP for the Contractor to describe its approach to maximize WCOSS throughput given WAN latency greater than 20 ms to NCEP's Washington, DC metro WAN, and between the Primary and Backup WCOSS. This requirement will be evaluated as part of the technical approach contained in Section M.2.3.1.

41. Q: G.6 Government Furnished Property, It is understood this clause refers to property under which the contractor has complete care, custody and control. Property which resides at a Government facility, by virtue of its location shall remain the responsibility of the Government. What is the GFP and GFE?

    A: NCEP will provide the NCEP WAN to each WCOSS facility. NCEP will provide racks/equipment, maintenance agreements, IT security, monitoring, and management to support NCEP network services for the NCEP WAN and NCEP Alternate Processing Site. The Contractor is responsible for the WCOSS LANs and connectivity to the NCEP WAN router at each WCOSS location. The Contractor is responsible for Internet access as noted in C.3.11.12. The Contractor will not have complete care, custody and control of the NCEP provided equipment located at each of the Contractor provided facility. Since the sites are unmanned by NCEP personnel, the RFP contains requirements for access controlled physical space, power, cooling and hands-only support. The final RFP, Section C, appendix I, will be updated with the list of GFE.

42. Q: Figuring Uptimes questions:
    Section F.1.1: States: The Government reserves the right to define, mark, calculate, and determine OUT.   This has been problematic in the past on the R&D contract when there were system problems. Please clearly define the OUT parameters?

    A: A: F.1.1 will be clarified in the final RFP. The Operational Use Time is defined in Section C, appendix H (glossary). During any month, Operational Use Time is determined by considering all WCOSS resources (primary and backup) in which a subset of this total resource is necessary to execute the entire NCEP Production Suite (NPS). The Operational Use Time disincentive is based on the number of minutes in a month when Contractor delivered and/or supported hardware, software, facilities, or services, were inoperable or unavailable and impacted NPS, resulting in performance below the Operational Use Time of 99.9%.

43. Q: Figuring Uptimes questions:

    3.3.11 States the system must support checkpoint restarting. Should there be a requirement that the contractor can only have DT (ODT or DDT), due to a contractor caused job failure back to the last checkpoint (1 hr max)?

    A: No. Down-Time is defined in Section C, appendix H, and will be clarified in the final RFP. Down-Time is the period of time when the WCOSS hardware, software, facilities, and/or services are inoperative or unavailable. The start of Down-Time is based on root cause analysis. Down-Time ends when the WCOSS is returned to NCEP in operable condition.

44. Q: Figuring Uptimes questions:
    OUT (App H): This reads as: Early in a cycle when only 30% of the Primary WCOSS is needed for NPS, (which is 15% of total Primary and Backup WCOSS), only 15 % of the total needs to be up to run the NPS and maintain 99.9%. This would make it much easier to keep 99.9% while the system is young. Please confirm.

45. A: The Government recognizes Operational Use Time may be easier to achieve during the start of the life-cycle when the NCEP Production Suite demands fewer computational resources. The statement: "only 15% of the total needs to be up to run the NPS " is incorrect since the NPS runs on either the Primary or Backup WCOSS and does not run on both WCOSS at the same time. Please note 30% is an approximation.

46. Q: Figuring Uptimes questions:
    How is it determined the percent of the Primary WCOSS that is needed to run NPS through the lifecycle of the system?

    A: The exact percent will vary with system architecture and will grow throughout the life-cycle. The NPS will never consume more resources than can be supplied by either the Primary or Backup WCOSS.

47. Q: Figuring Uptimes questions:
    The Gov will control the failover process. In case of a failure of the current system running the NPS, is the time for failover counted as ODT?

    A: The time required for failover will be counted as Operational Down-Time if the failure was caused by Contractor delivered and/or supported hardware, software, facilities or services.

48. Q: Do the Operational Use Time requirements apply to both the Primary and Backup systems?

A: Yes, Operational Use Time follows the NPS and NPS executes on either the Primary or Backup WCOSS.

49. Q: Does the Development Use Time apply to both the Primary and Backup systems?

A: Yes, Development Use Time follows Transition to Operations (T2O) and T2O executes on the Primary and Backup WCOSS.

50. Q: Can you specify the breakdown of Operational Use Time and Development Use Time for the primary and backup systems?

A: The breakdown will vary. T2O (Development Use Time) resources are those resources not used (or held in reserve) for the NPS (Operational Use Time). The NPS changes over time as do the computational resources it requires. The NPS will never consume more resources than can be supplied by one of the two WCOSS.

51. Q: Section 3.7.1, Porting NCEP Codes to the New WCOSS states that porting of the current codes and applications to the new WCOSS is not the responsibility of the contractor, including upgrades and refreshes. Does this include optimization support services for the primary and backup systems? Can the government estimate the transition time required to port the NCEP codes to the current WCOSS and how does this tie into the payment disincentives should the system be operational ready and accepted?

A: As noted in C.3.15.2, Application Support, the Contractor will provide sufficient support staff to assist the Government with code optimization, data migration, training, and code conversion throughout the life of the contract. The Government anticipates an application support staff of at least three full-time personnel to support the Primary and Backup systems. Since the porting of code is the Government's responsibility, there are no disincentives associated with code transition.

52. Q: The government stated on pg. 9, Section E, "Class A modifications do not include any changes to source solely for performance. Since there may be many causes for such changes (e.g. existing non-standard language usage within the application, workarounds required for compiler bugs, etc.), the Government cannot state categorically that such modifications will not

be evaluated without some sort of risk factor assigned." However, optimized performance and the quality of the benchmark results is vital to the evaluation process. To eliminate ambiguity in this process, will the government release different compiled versions of the benchmark codes to assist in limiting any modifications to the codes?

A: The Government will not release different compiled versions of the benchmark codes.

53. Q: On page 9, Section E.1.2.1.2, it is stated that "The Government may submit applications or perform tests that have been shown to be problematic on other systems." Will you provide a list of those in prior to the live test demo (LTD) or provide enough detail on those problems as a way to pre-evaluate the systems in preparation for the LTD.

A: E.1.2.1.2 will be removed from the final RFP.

54. Q: Can the government state the compiler used for the benchmarks, platform, and system successfully run on prior to the contractor having access to those benchmarks?

A: WCOSS draft RFP benchmarks located at http://rdhpcs.noaa.gov/wcoss/ were compiled and ran on the following systems:

-Intel Westmere cluster 24 Gigabytes/12 CPU nodes. Each node has 24 Gigabytes. All benchmarks were built and ran using the Intel compiler suite Intel/11.1.072, except the Wave model which used PGI level 10.6.

-Cray XT5 cluster 16 Gigabytes/12 CPU nodes. The GFS, Wave, and I/O were built and ran with the PGI compiler /opt/pgi/10.3.0/linux86-64/10.3/bin/pgf90. The GSI and NMMB were built and ran with the Intel compiler suite Intel/11.1.064.

-The current WCOSS Power6 cluster using xlf 12.1.0.2. Please see section C, appendix A for current WCOSS system information.

55. Q: Is there a deadline for Class A changes to be approved by and will those requests be released to other potential bidders?

A: The RFP deadline for proposal submission is the deadline for Class A changes. Requests for approvals of Class A changes will not be released to other potential bidders.

56. Q: In the evaluation of runtime variability, is the +/- 5% of average wall clock time a bar that must be met, or is better performance taken into account in the scoring?

A: +/- 5% is the minimum acceptable runtime variability. Performance that exceeds the requirement will be considered a strength in the technical evaluation.

57. Q: Is runtime variability between both the primary and backup also cross correlated and does that +/- 5% requirement apply? How is this evaluated in the proposal?

A: No, both the Primary & Backup systems must independently meet the minimum acceptable runtime variability. Since both systems are to be architecturally identical, these systems are expected to attain the same level of performance. Performance that exceeds the requirement will be considered a strength in the technical evaluation.

58. Q: For Section F.1.3, the Disincentives for the Operational Use Time using root-cause analysis leaves no flexibility for issues beyond control of the contractor, including for example the WAN and electrical grid. Can the government outline its root cause analysis and include what it considers factors beyond the contractor's control?

A: Root cause analysis is situational to the specific failure. The Contractor is responsible for meeting performance requirements on hardware, software, facilities, and services that the Contract delivers and/or supports.   Two examples of failures the Government would consider to be beyond the Contractor's control include an NCEP WAN outage and a Government-coded application failure.

59. Q: What are the Security level requirements for both contractor sites?

A: The final RFP will be updated with the WCOSS security level noted as a High Impact System in accordance with FIPS PUB 199.

60. Q: Because the primary and backup facilities are both contractor provided and in two separate locations, do LTDs need to be performed at both locations, or just the proposed primary site?

A: Live Test Demonstration (LTD) is a pre-award requirement only. LTD will be completed at a single Contractor-designated facility prior to contract award. The final RFP will clarify the Government preference to conduct the LTD from the Washington, DC area using remote network access to the Contractor LTD system.

61. Q: Is T2O currently running on any other NOAA or government HPC systems? If so, can the government provide details as to the performance, systems, and software utilized?

A: No, T2O is the last stage in the development of operational applications and must run within the WCOSS.

62. Q: Section 3.4.16, Access to Next Generation HPC Architecture of the SOO, it says that the contractor shall provide NOAA access to a system using next generation HPC architecture to provide NOAA with experience within upcoming HPC technologies. Is this system above and beyond the primary and backup systems of the WCOSS? What are the location requirements for this system? Also, do the same operational and development use time standards apply toward invoicing, and is this system required to act or interact in any operational way with the primary or backup of the WCOSS? Is the system paid for in the same manner as the primary and backup systems?

    A: This requirement will be removed in the final RFP.

63. Q: Section 3.15, Support, calls for the contractor to provide System Administration, Application, Helpdesk, and other support services. Will the contractor staff work with the government during the porting process to ensure cross-training, knowledge transfer, and information exchange to include configuration management and documentation?

    A: Yes.

64. Q: C.2.9.2 Concurrency
    Can the government be more specific about when data from JPSS will actually be used by NCEP? How does the factor of 2.2x relate to the benchmarks?

    A: References to the JPSS will be removed from the final RFP.

65. Q: C.3.6.2 Performance Upgrades Acceptance
    It is not possible for vendors to bid performance improvements (x-factor) without knowing the codes that will be used. Please remove the following from the above requirement:
    The Government reserves the right to include additional models that are more representative of the NCEP model suite including computationally intensive or I/O intensive applications at the time of the upgrade. These models will be included as additions to or replacements of existing models in the benchmark suite.

    A: This language will be removed from the final RFP C.3.6.2.

66. C.3.6.4 WORKLOAD PROJECTIONS

The table 3.6-1 is very confusing. It is unclear how the performance requirements relate to the benchmark codes. The table itself is labeled "TABLE 3.6-1: TOTAL ESTIMATED REQUIRED COMPUTING INCREASES OVER THE LIFE OF THE CONTRACT." Does the table reflect estimated computing increases or required computing increases? If the Government plans to keep this table, please put one fiscal year per line with the computing and storage requirements and define how they relate to the benchmark codes?

A: Table 3.6-1 reflects estimated computing increases and will be clarified in the final RFP with linkage to the benchmark process.

67. C.3.6.4 WORKLOAD PROJECTIONS

Please further categorize the computing increases presented in Table 3.6-1 by fiscal year (vs. two years per line). Based on the current estimated start date and a five-year base period, the computing requirements for the last year of the base period appears to fall somewhere between the 2016-2017 requirement of "27", so the actual requirement for the last year of the base period, etc, is unclear.

A: Table 3.6-1 will be clarified in the final RFP.

68. C.3.6.4 WORKLOAD PROJECTIONS

It appears that the computing requirements increase in the transition period from 81 to 243 (for the base). Can you please confirm that the intent is for these requirements triple (from 81 to 243) during transition?

A: Table 3.6-1 will be clarified in the final RFP.

69. Q: Section C.3.20.9 NCEP Alternate Processing Site

Is NCEP planning to provide the firewalls, gateways and rack contents including maintenance agreements to support these contents that the vendor can then manage?

A: NCEP will provide racks/equipment, maintenance agreements, IT security, monitoring, and management to support NCEP network services for the NCEP WAN and NCEP Alternate Processing Site. The Contractor is responsible for the WCOSS LANs and connectivity to the NCEP WAN router at each WCOSS location. The Contractor is responsible for Internet access as noted in C.3.11.12. The Contractor will not have complete care, custody and control of the NCEP provided equipment located at each of the Contractor provided facility. Since the sites are unmanned by NCEP personnel, the RFP contains requirements for access controlled physical space, power, cooling and hands-only support.

70. Q: Section C.3.20.10 NCEP WAN and Network Services

Is NCEP planning to provide the firewalls, gateways and rack contents including maintenance agreements to support these contents that the vendor can then manage?

A: NCEP will provide racks/equipment, maintenance agreements, IT security, monitoring, and management to support NCEP network services for the NCEP WAN and NCEP Alternate Processing Site. The Contractor is responsible for the WCOSS LANs and connectivity to the NCEP WAN router at each WCOSS location. The Contractor is responsible for Internet access as noted in C.3.11.12. The Contractor will not have complete care, custody and control of the NCEP provided equipment located at each of the Contractor provided facility. Since the sites are unmanned by NCEP personnel, the RFP contains requirements for access controlled physical space, power, cooling and hands-only support.

71. Q: APPENDIX I: GOVERNMENT FURNISHED EQUIPMENT (GFE)

The draft RFP specified that the Government was not providing any Government furnished equipment. However, the RFP did state that the Wide Area Network (WAN) would be provided by the government (C.3.4.15 – ARCHIVE SYSTEM ACCESSIBILITY). Will the government provide the necessary equipment at each of the sites to connect into this WAN? This equipment may include the Ethernet routers with appropriate interfaces. Does this equipment also include the necessary firewall infrastructure? Will the government be responsible for monitoring and managing these components, and also be responsible for the security and firewall management including hardware, software, and personnel?

A: NCEP will provide the NCEP WAN to each WCOSS facility. NCEP will provide racks/equipment, maintenance agreements, IT security, monitoring, and management to support NCEP network services for the NCEP WAN and NCEP Alternate Processing Site. The Contractor is responsible for the WCOSS LANs and connectivity to the NCEP WAN router at each WCOSS location. The Contractor is responsible for Internet access as noted in C.3.11.12. The Contractor will not have complete care, custody and control of the NCEP provided equipment located at each of the Contractor provided facility. Since the sites are unmanned by NCEP personnel, the RFP contains requirements for access controlled physical space, power, cooling and hands-only support. The final RFP, Section C, appendix I, will be updated with the list of GFE.

72. Q: In the event that the Government determined it in their best interest to offer a Government provided facility for one or more of the WCOSS facility requirements, would that facility be made available to all Offerers

A: There is no Government furnished facility available for the new WCOSS contract.

73. Q: Section E. Inspection and Acceptance

E.1.2.1.2: Can the Government provide specific applications and/or examples of the type of test that are referenced in this requirement?

A: E.1.2.1.2 will be removed from the final RFP.

74. Q: E. Inspection and Acceptance

E.1.2.1.3: Will the data used for these test jobs be the same? For example, if one of the jobs is a serial post processing job that concatenates 3000 files into a single file, can we assume that we will be using the same 3000 files for the duration of the test?

A: No. At the Government's discretion, the Government may use the same or different files and contents in each instance of a test.

75. Q: Section E.1.2.2 Performance

E 1.2.2.1.2: Contractors are required to submit guaranteed minimal level of performance specifications at proposal submission for the base period and growth options. Will the Government agree to utilize the contractor's proposed base period guaranteed minimal level of performance as the basis for the growth options proposed?

A: Yes.

76. Q: Section E.1.2.2 Performance

E 1.2.2.1.2: Contractors are encouraged to provide best optimal performance and hope to exceed guarantees whenever possible. The requirement is unclear if the proposed baseline or actual realized performance of the base system will be used as the baseline metric for future/growth opportunity measurements/acceptance.

A: Realized performance will be used.

77. Q: E.1.2.4.1: For clarification, can the Government provide an example of a data integrity issue that is of concern?

A: E.1.2.4.1 will be removed from the final RFP.

78. Q: E.2.3.3: Please Define NCEP workload. Does this mean production workload or will the system be open to both production and development workload?

    A: NCEP workload may be either NPS (production) or T2O (development).

79. Q: E.2.3.7: Please Define "Dual Run".

    A: Reference to "Dual Run" will be removed from the final RFP.

80. Q: Section 3.8.4 - Bandwidth
    What is the benchmark basis for the 50 GB/s number? How is it measured?

    A: Section C.3.8.4 will be clarified in the final RFP.

81. Q: Subject: Section 3.9. - Shared Storage System
    What is the basis for the starting capacity of the SSS?

    A: Section C.3.9 will be clarified in the final RFP.

82. Q: Section 3.4.7 Processors and Memory
    Can the government confirm that the benchmark suite provided is to be used as the basis to calculate memory requirements?

    A: Do not use the benchmarks as the basis for memory requirements. The Government will clarify the memory requirements in the final RFP.

83. Q: Section J, Benchmark Instructions. The government may decide to not allow some optimizations. In the event the government disallows vendor optimizations, what time frame will be offered to submit an alternate solution?

    A: No extension to the submission of proposals is currently anticipated.

84. Q: Facility - Section 3.20 for Performance Requirements. This section references having two sites one in Washington area and one 120 miles or greater from the Washington area. Question: Is the Government owned facility in Fairmont still available? If so at what cost?

Question: Will the Government entertain a "Container" solution for housing either or both of the systems?

A: There is no Government furnished facility available for the new WCOSS contract. The RFP does not prohibit the Contractor from proposing a container solution.

85. Q: Scaling – Section 3.6 Performance Improvements.
The Government wants major upgrades every 30 months. The Section 2 Background section states that there are approximately 900 applications, 40 of which utilize MPI.
Question: With microprocessors leveling out at approximately 3GHz and most of the applications not MPI scalable, how does the government expect to see the codes scale?
Question: Do the codes have potential for accelerators like GP/GPU's
Question: Can the codes be re-written to use MPI or other scaling techniques?
Question: Is the Government going to do these changes?

A: The Government is responsible for optimization of all operational applications. Per C.15, the Contractor staff will be asked for assistance as needed.

86. Q: Scaling – Section 3.6 Performance Improvements.
Question: How can the vendor define the future upgrades without control of the codes?

A: The final RFP will be modified to indicate which codes will be utilized as benchmarks for future upgrades.

87. Q: Code modifications – Section E 1.1
The government is limiting source code changes by the vendor to Class A changes which do not allow any changes made just for performance.
Question: Does the Government have suggestions on how to achieve the expansion required?
Question: What latitude will the vendor have to modify the codes for scalability?

A: The government is not limiting source code changes to only Class A. Source code optimizations made outside of Class A require the Contractor to deliver two sets of tables in Section J Attachment 6; one set for Class A and one set for the optimized versions. The Government will clarify this in the final RFP Section J, attachment 6.

88. Q: F.1.1 Operational Use Time reads as follows:

Operational Use Time requirement is defined in Section C.3.3 and Section C Appendix H (glossary). Operational Use Time is determined monthly.

The Government reserves the right to define, mark, calculate and determine Operational Use Time.

This seems to create a conflict as to the definition of Operational Use Time and implies that the Government can arbitrarily change redefine the requirement at will. Please clarify.

89. A: F.1.1 will be clarified in the final RFP. Operational Use Time is defined in Section C, appendix H (glossary). During any month, Operational Use Time is determined by considering all WCOSS resources (primary and backup) in which a subset of this total resource is necessary to execute the entire NCEP Production Suite (NPS). The Operational Use Time disincentive is based on the number of minutes in a month when Contractor delivered and/or supported hardware, software, facilities, or services, were inoperable or unavailable and impacted NPS, resulting in performance below the Operational Use Time of 99.9%.

90. Q: Is the vendor responsible for power and cooling costs?

    A: Yes.

91. Q: The contract has a value of $502M and NOAA's current program has approx. $300M to support this contract. Will NOAA seek new money for the $202M that does not appear to be accounted for?

    A: Funding for the base period of performance was approved by the NOAA and the Department of Commerce. The total estimated value of this contract is the not-to-exceed contract value. The award and potential scope of the contract after award is subject to availability of appropriations and evolving agency need.

92. Q: Please provide more details on the schedule as it pertains to funding and task orders.

    A: Task Order 1 will be issued concurrently with the base contract award, contingent upon availability of funds. Section L will be revised accordingly. Future task orders are subject to availability of appropriations and evolving agency need.

93. Q: How many task orders does NOAA foresee over the life of the contract?

A: Task Order 1 will be issued concurrently with the base contract award, contingent upon availability of funds. Section L will be revised accordingly. Future task orders are subject to availability of appropriations and evolving agency need.

94. Q: If the first task order covers the base period of four years, will there be a second task order for the mid-term upgrade? Is it a new T/O or a modified T/O?

    A: Task Order 1 will be issued concurrently with the base contract award for the base period of five years, contingent upon availability of funds. Section L will be revised accordingly. Future task orders are subject to availability of appropriations and evolving agency need. Task 1 includes the upgrade +30 months from the beginning of the base period. The final RFP will clarify C.3.6 and table C.3.6-1 compute growth and schedule for upgrades.

95. Q: Please explain the upgrades and the year NOAA requires upgrades in the context of the contract.

    A: From the beginning of the base period with base funding: the requirement is for the initial WCOSS within +12 months and an upgrade +30 months. From the beginning of the option period with base funding, if the option period is exercised by the Government: the requirement is for an upgrade +1 month and again at +30 months. Growth options may be exercised at the discretion of the Government during the life of the contract to provide additional upgrades. The final RFP will clarify C.3.6 and table C.3.6-1 compute growth and schedule for upgrades.